NOTE VIII.

A NEW SPECIES OF ARIUS

BY

Dr. C. M. L. POPTA.

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Among some fishes, forwarded by the late Dr. Bleeker to the Leyden Museum, I came across four specimens evidently belonging to the genus *Arius*, differing however from all known species of that genus. They therefore represent a new species, which I now describe under the name of

Arius Bleekeri

in honour of the great Ichthyologist, who collected them.

The systematic position of this new species is between the two East Indian *Arius macronotacanthus* Blkr. and *Arius coelatus* Val. After having described it, I will compare my *Arius Bleekeri* with these two well-known forms.

The body is elongated, anteriorly about as high as broad, posteriorly compressed, its height is 5 times contained in the total length without the caudal and 6½ times with the caudal; the head is depressed, 4 times in the total length without the caudal, 5¼ with the caudal, the height of the head is 1½ times and the breadth 1¼ times in its length; the upper jaw is the longest; the eyes are in the hind part of the anterior half of the head, their diameter is 5 times in the length of the head, the distance between them is nearly 3 times their greatest diameter. The upper surface of the head and the occipital process are granulated, granules fine, partly in lines; the longitudinal median groove is 5 times longer than its greatest width, in its posterior half is a round cavity and it ends posteriorly in a narrow point, which does not reach the occipital process; the occipital process is as long as it is wide at its base and it is but slightly keeled; the basal bone of the dorsal spine is small, crescent shaped with some granules; the opercula are smooth, veined; the scapula is pointed, rough; the nostrils are nearer to the mouth than to the eyes, placed close together, the anterior ones are round, the posterior ones oval with a valve; the maxillary barbels reach the end of the pectoral spines, the outer mandibular pair reach as far as the posterior point of the scapular bone, the intermandibular pair reach a little beyond the gill-opening; the length of the snout, measuring to the anterior border of the eye, is $1\frac{1}{2}$ times the length of the eye; the snout is projecting beyond the cleft of the mouth; cleft of the mouth crescent shaped, not reaching the anterior border of the eye; the teeth in the jaws are villiform, in bands; teeth on the palate villiform, in two oval patches, which are long $\frac{5}{6}$ of the length of the eye, the distance between the patches is about equal to the breadth of the patches, and this breadth is the half of their length, they are very divergent posteriorly, the length parallel to the maxillary teeth; the lateral line is very conspicuous, almost not ramificated, and where a slight ramification is to be seen, it is very short and scarcely visible; anteriorly the lateral line is descending, in the middle and posteriorly it is straight, at the base it is not bifurcated, but directed upwards; the dorsal lateral pores, hardly visible without a lens, are in simple transverse parallel series; the first dorsal fin is rayed, pointed, 3 times higher than the length of the base, the spine is not strong, 1 to $1\frac{1}{5}$ in the length of the head, on the sides striated, anteriorly it is granulated in the lower part, serrated in the upper part, posteriorly it is nearly smooth in the lower part, serrated in the upper part, the teeth directed downwards before and behind, the spine has a soft prolongation, the distance from the first dorsal to the end of the snout is contained $3\frac{2}{3}$ in the total length with the caudal; the dorsal adipose fin is in its total length $1\frac{5}{9}$ longer than the length of its base and the height is $\frac{5}{9}$ of the length of the base, the distance to the first dorsal is nearly 5 times the length of its base, the end is obliquely rounded; the pectoral fins are pointed, the spine is not strong, either not or a little shorter than the dorsal spine, on the sides striated, anteriorly in the lower part granulated, in the upper part serrated, posteriorly a small lower part smooth, the other greater upper part serrated, the spine has a soft prolongation; the axillary pore is small; the ventral fins are obliquely rounded at the end, reaching the anal fin, shorter than the pectorals; the anal fin is anteriorly rounded, in the latter half of the upper margin a little emarginated, its base is more than twice as long as the base of the adipose dorsal fin, the height is about $\frac{3}{5}$ of the length of its base; the caudal fin is deeply forked, the upper lobe is longer and more pointed than the under lobe, $4\frac{1}{3}$ in the total length with caudal; the colour of the body is in spirits on the upper side violet-brown, on the lower side white, all the fins are brownish, the adipose dorsal without a black spot.

B 6, D 1/7, P 1/9, V 1/5, A 8/16 or 9/15, C 1/13/1 with short laterals. The length of the four specimens is varying between 148 and 170 mM.

The relation of this new species with *Arius macronotacanthus* Blkr. is as follows: the height of the head of both is $1\frac{1}{2}$ times in its length; the upper surface of their head and their occipital process are much granulated; the basal bone of their dorsal spine is small; they have both two patches of teeth on the palate, these are convergent before and much divergent behind, longer than broad, the length parallel to the maxillary teeth; the teeth of their dorsal spine are directed downwards; their adipose fin is of average size, much shorter than the anal.

But *Arius Bleekeri* is distinguished from *A. macronotacanthus* Blkr. while the body is less high; the head is smaller; the upper jaw is the longest; the median groove is posteriorly shorter and not similar; the barbels are longer; the teeth on the palate are villiform and not obtusely conical or granular; the shape of the patches is oval and not pearshaped; the lateral line is not so ramificated and is not bifurcated at the base of the caudal, but is directed upwards; the dorsal spine and the pectoral spine are less strong and not reticulated at the sides; the adipose fin is more slender and has no black spot; the ventral fins reach the anal fin; the anal fin has more rays; the caudal fin is longer and the lobes are more pointed.

The relation of it with *Arius coelatus* Val. is as follows: the height of the head is about the same; the upper surface of the head and the occipital process is in both much granulated; the upper jaw is also the longest; they have both two patches of villiform teeth on the palate and these are at the same place; their adipose fin is of average size, much shorter than the anal.

They differ in the following respects: the body of *A. Bleekeri* is a little less high; the median groove is posteriorly shorter and not similar; the barbels are a little longer; the patches of teeth are oval and not subtriangular; the lateral line is not bifurcated at the base of the caudal, but directed upwards; the dorsal spine and the pectoral spine are less strong and not cellular at the sides; the caudal fin is longer, the lobes are pointed and not rounded; the adipose fin has no black spot.